

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 June 2004 (17.06.2004)

PCT

(10) International Publication Number
WO 2004/050142 A2

- (51) International Patent Classification⁷: **A61M**
- (74) Agent: **BELL, Adam, Warwick**; Durect Corporation, 10240 Bubb Road, Cupertino, CA 95014 (US).
- (21) International Application Number: **PCT/US2003/038548**
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 4 December 2003 (04.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/430,759 4 December 2002 (04.12.2002) US
- (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): **DURECT CORPORATION** [US/US]; 10240 Bubb Road, Cupertino, CA 95014 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **POUTIATINE, Andrew, I.** [US/US]; 320 Nova Lane, Menlo Park, CA 94025 (US). **GILLIS, Edward, M.** [US/US]; 1202 Stafford Drive, Cupertino, CA 95014 (US). **PARIKH, Riten** [US/US]; 10164 Parkwood Drive #5, Cupertino, CA 95014 (US). **FILICE, James, A.** [US/US]; 1555 Elswood Drive, Los Gatos, CA 95032 (US).
- Published:**
— *without international search report and to be republished upon receipt of that report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: **CATHETER LOOP MANAGER**

(57) Abstract: A catheter loop manager apparatus which controls the slack portion of a catheter located adjacent to an implanted pump and prevents fibrotic encapsulation of the slack catheter portion. The catheter loop manager comprises a retainer element configured to associate with an implantable pump and to releasibly hold or retain a loop or section of catheter adjacent to the pump. A pull tool is used to releasibly engage a catheter section and pull the catheter section into a loop within a retention channel in the retainer element.

WO 2004/050142 A2